



# ***Department of Toxic Substances Control***

***Engineering Geologist***

## **Supplemental Application Examination**

**For Examination Use Only. Do not write in this section.**

Candidate ID #: \_\_\_\_\_

Date Received: \_\_\_\_\_ List Date: \_\_\_\_\_

Application #: \_\_\_\_\_

Total Score: \_\_\_\_\_

## ENGINEERING GEOLOGIST EXAMINATION INTRODUCTION

The Department of Toxic Substances Control, Engineering Geologist (Range A, B, C, and D) examination consists entirely of a **TRAINING AND EXPERIENCE EXAMINATION**, which will be used to evaluate your education, training, experience and familiarity with or understanding of a particular subject or task. Candidates who meet the minimum qualifications as listed in the examination bulletin may take this examination.

**All competitors who are successful in this examination will be eligible to be considered for a job opening with the Department of Toxic Substances Control. The eligible list consists of 6 ranks and will remain in existence for 1 year.** Once your eligibility expires, you must reapply by submitting a new examination. Please be aware that placement on the eligibility list does not guarantee that you will be selected for a job opening.

As this examination is administered on a periodic basis, **candidates may participate only once during a 6 month period.** Therefore, if you are unsuccessful in this examination, you must wait 6 months to re-compete. If a candidate submits a second examination prior to the expiration of the 6 months, it will not be accepted.

**Your responses are subject to verification.** Applicants successful in this examination will be required to provide to the Examination Unit documentation of all education (**transcripts and a diploma verifying your major field of study**) and other documentation necessary to verify your responses. Providing false information on a State examination is a violation of State law, and could result in an individual being removed from an employment list and banned from future employment with the State.

**Veteran's Preference Points** – Are you a veteran, disabled veteran, spouse of a disabled veteran or widow of a veteran and have not previously been a permanent State of California employee? You may obtain a Veteran's Preference Eligibility form by accessing the State Personnel Board's website at [http://www.spb.ca.gov/jobs/faq/veterans\\_information.htm](http://www.spb.ca.gov/jobs/faq/veterans_information.htm) or by calling 916-341-5127. Instructions on how to apply for the additional points are on the form.

**Contact Information** – You are responsible for keeping your contact information up to date. **To update your name, address, phone number or location preference** you must put your request in writing and submit it to: Department of Toxic Substances Control, ATTN: Exam Unit, 8800 Cal Center Drive, Sacramento, CA 95826.  
***(Please note: These changes MUST be made in writing and cannot be made by phone.)***

## ENGINEERING GEOLOGIST

### SUPPLEMENTAL APPLICATION AND EXAMINATION

Thank you for your interest in California State civil service employment. The State of California is an Equal Employment Opportunity Employer. The Engineering Geologist examination will consist of a supplemental application/examination, which will be used to evaluate your knowledge, experience, education, training, familiarity or understanding of a particular subject or issue.

This is a scored test and will account for 100% of your score. It is important that you fill the examination out completely and accurately. YOUR RESPONSES ARE SUBJECT TO VERIFICATION.

To process your application and conform to requirements for statistical information from a number of State and Federal agencies, we need your Social Security Number, age, ethnic, disability, and gender information.

LAST NAME: \_\_\_\_\_ FIRST NAME: \_\_\_\_\_

STREET ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

HOME PHONE: ( \_\_\_\_\_ ) \_\_\_\_\_ - \_\_\_\_\_

SOCIAL SECURITY NUMBER: \_\_\_\_\_

(Providing your Social Security Number is voluntary in accordance with the Federal privacy act of 1974 (PL-93-579). In this exam, your Social Security Number is required to process applications for Veteran's Preference Points, checks for eligibility to retake the examination, and verify statements regarding prior employment. Your Social Security Number is used as your identification number for all exams. Failure to provide your SSN could result in substantial delays in establishing your eligibility for employment.)

This question applies to individuals who have been previous State of California employees. Rule 211 provides that a DISMISSED State employee (an employee who previously worked for the State of California and was dismissed) may only participate in State Civil Service examinations if he or she has obtained prior consent from the State Personnel Board. If this pertains to you, do you have written permission from the State Personnel Board Executive Officer to take this examination?

IF YOU WERE DISMISSED AND DO NOT HAVE PERMISSION FROM THE EXECUTIVE OFFICER OF THE STATE PERSONNEL BOARD TO TAKE THIS EXAMINATION, STOP HERE! DO NOT TAKE THIS EXAMINATION! You must receive permission and attach letter to this examination.

#### **THIS AFFIRMATION MUST BE COMPLETED:**

I hereby certify and understand that the information provided by me on this questionnaire is true and complete to the best of my knowledge and contains no willful misrepresentation or falsifications. I also understand that if it is discovered that I have made any false representations I will be removed from the list resulting.

Signature (REQUIRED): \_\_\_\_\_

#### **RETURN ALL COMPLETED FORMS AND THE EXAMINATION TO:**

**Department of Toxic Substances Control  
8800 Cal Center Drive  
Sacramento, CA 95826  
ATTN: Examination Unit**

**YOUR EXAMINATION RESULTS WILL BE MAILED TO YOUR HOME.**

# ENGINEERING GEOLOGIST EXAMINATION

## SECTION A – Education

Please provide information for all applicable degrees. You must provide the year and institution to receive credit for your degree(s). All degrees are subject to transcript verification.

Geology/Earth Sciences Degree	Year Received	Institution
Bachelor's Degree		
Master's Degree		
Doctorate Degree		
<b>Other <u>Natural Sciences</u> Degree: Specify field: _____</b>		
Bachelor's Degree		
Master's Degree		
Doctorate Degree		

## SECTION B – Specialized Coursework or Training

Please indicate which of the following specialized courses you have completed (either in, or outside of college) by providing the year and institution/location. All coursework is subject to verification.

Course	Year Completed	Institution/Location
Hydrogeology		
Groundwater Modeling		
Vadose Zone Modeling		
Contaminant Geochemistry		
Contaminant Fate and Transport		
Environmental Cleanup Technology		
Engineering Geology		
Environmental Geology		
Geologic Hazards		

## SECTION C – Work Experience or Internships

Please provide information for all applicable work experience and internships (paid or unpaid). Applicable experience is that which involved the application of geologic and/or environmental science knowledge, principles, and methods. You must provide the length of time in the position and a reference to receive credit for your experience.

Position and Location	Length of time (specify months or years)	Name <u>and</u> phone number or email address of a supervisor or other person who can verify your experience <b>(Required)</b>
1.		
Briefly describe your major duties in this position:		

Position and Location	Length of time (specify months or years)	Name <u>and</u> phone number or email address of a supervisor or other person who can verify your experience <b>(Required)</b>
2.		
Briefly describe your major duties in this position:		

Position and Location	Length of time (specify months or years)	Name <u>and</u> phone number or email address of a supervisor or other person who can verify your experience <b>(Required)</b>
3.		
Briefly describe your major duties in this position:		

Position and Location	Length of time (specify months or years)	Name <u>and</u> phone number or email address of a supervisor or other person who can verify your experience <b>(Required)</b>
4.		
Briefly describe your major duties in this position:		

## SECTION D – California Professional Licenses or Certifications

Please indicate if you hold any of the following licenses or certifications by indicating the year obtained and license number (if applicable). All licenses or certifications are subject to verification.

License or Certification	Year First Obtained	License Number (if applicable)
Professional Geologist		
Certified Hydrogeologist		
Certified Engineering Geologist		
Certified Geophysicist		

## SECTION E – Professional References

In Section F you will be asked about your knowledge, skills and abilities applicable to the Engineering Geologist classification. In the table below, please provide information about practicing professionals who can verify that you have those knowledge, skills and abilities.

Name of Professional Reference	How does this person know you? (e.g. professor, supervisor, colleague)	Phone number or email address (required)
1.		
2.		
3.		
4.		
5.		

## SECTION F – Knowledge, Skills and Abilities

### Instructions

On the next page you will see a list of knowledge, skills and abilities that are applicable to the Engineering Geologist classification. You do not need to possess all the knowledge, skills and abilities listed to be qualified, but knowing about the knowledge, skills and abilities you do possess will help us determine your suitability for the job.

You will first rate the degree to which you possess each knowledge, skill or ability by placing the appropriate number from the following rating scale in the column next to the knowledge, skill or ability.

1 = I have none of this knowledge, skill or ability

2 = I have some of this knowledge, skill or ability, but will require guidance

3 = I have enough of this knowledge, skill or ability to perform associated tasks independently

Next, for each knowledge, skill or ability you rated a “3”, you will indicate which of your references listed in Section E can verify your knowledge, skill or ability. For example, if your reference Number 2 can verify that you have a particular skill, you would place a “2” in the column next to that skill. If you did not rate that knowledge, skill or ability a “3”, leave the square blank. **You must provide a reference for each knowledge, skill or ability you rate a “3” in order to get credit for having that knowledge, skill or ability.**

Then you will indicate where you obtained each knowledge, skill or ability by placing an “X” in the appropriate column to indicate that you obtained the knowledge, skill or ability in the degree program you listed in Section A, the specialized coursework or training you listed in Section B, and/or in the work or internship position(s) you listed in Section C. Check all that apply. **You must indicate where you obtained each knowledge, skill or ability to get credit for having that knowledge, skill or ability.**

**Please go to the next page.**

## Knowledge, Skill and Ability Ratings

1

In this column, indicate the degree to which you possess each knowledge, skill or ability by entering 1, 2, or 3 from the following scale:

1 = I have none of this knowledge, skill or ability.

2 = I have some of this knowledge, skill or ability, but will require guidance.

3 = I have enough of this knowledge, skill or ability to perform associated tasks independently

2

If you rated your possession of a knowledge, skill or ability a "3", in this column, enter the number of a reference in Section E who can verify your knowledge, skill or ability

3

In these columns, indicate where you obtained each knowledge, skill or ability by placing an "X" in the appropriate boxes (check all that apply)

In the degree program listed in Section A

In the specialized coursework or training listed in Section B

In the work or internship position(s) listed in Section C

### General Knowledge and Skills

- 1) Knowledge of statistics
- 2) Knowledge of slope stability
- 3) Computer skills including databases and spread sheets
- 4) Skill to conduct scientific and technical research
- 5) Skill to evaluate seismic hazards
- 6) Skill to use Geographical Information Systems (GIS)
- 7) Skill to assess data quality
- 8) Skill to prepare professional documents

### Project Management

- 1) Ability to prioritize a workload to achieve project tasks
- 2) Ability to comprehend documentation for completion of work tasks
- 3) Ability to coordinate with various individuals and/or agencies to ensure multi-disciplinary collaboration on projects and tasks
- 4) Ability to explain technical information to others
- 5) Ability to represent the Department at public meetings

### Hazardous Material Site Characterization/Evaluation

- 1) Knowledge of structural geology
- 2) Knowledge of stratigraphy
- 3) Knowledge of cross-media effects
- 4) Knowledge of the principles of human health risk assessment
- 5) Knowledge of constituent fate and transport
- 6) Knowledge of the natural attenuation of contamination
- 7) Knowledge of techniques for producing geologic maps and cross sections
- 8) Skill to use geological maps
- 9) Skill to determine contaminant pathway migration
- 10) Skill to assess vapor intrusion risk

Continue to the next page.



Please continue rating your knowledge, skills and abilities.

Indicate the degree to which you possess each knowledge, skill or ability by entering 1, 2, or 3 from the following scale:

1 = I have none of this knowledge, skill or ability.

2 = I have some of this knowledge, skill or ability, but will require guidance.

3 = I have enough of this knowledge, skill or ability to perform associated tasks independently

If you rated your possession of a knowledge, skill, or ability a "3", in this column, enter the number of a reference in Section E who can verify your knowledge, skill or ability

Indicate where you obtained each knowledge, skill or ability by placing an "X" in the appropriate boxes (check all that apply)

In the degree program listed in Section A

In the specialized coursework or training listed in Section B

In the work or internship position(s) listed in Section C

#### Groundwater and Vadose Zone

1) Knowledge of ground water and soil sampling techniques

2) Knowledge of ground water and vadose zone modeling methods

3) Knowledge of ground water and vadose zone remediation methods

4) Knowledge of the behavior of inorganic compounds in environmental media

5) Knowledge of the behavior of organic compounds in environmental media

6) Knowledge of ground water - surface water interactions

7) Knowledge of well drilling and construction methods

8) Knowledge of well and bore hole decommissioning techniques

9) Skill to review aquifer test work plans

10) Skill to prepare ground water sampling and analysis plans

11) Skill to prepare ground water contour maps

12) Skill to determine ground water elevation

13) Skill to determine ground water hydraulic conductivity

14) Skill to evaluate ground water transmissivity

15) Skill to determine ground water contamination sources

16) Skill to measure ground water gradients

17) Skill to determine ground water flow direction

18) Skill to review ground water analytical data

19) Skill to review aquifer test data

20) Skill to collect representative ground water samples

CONDITIONS OF EMPLOYMENT (631)

NAME \_\_\_\_\_(Print Name)

EXAMINATION TITLE(S): \_\_\_\_\_

FINAL FILING DATE: \_\_\_\_\_

IDENTIFICATION NUMBER: \_\_\_\_\_  
(Testing Office will enter)

Government Code Section 19680 through 19682 requires that all State civil service examinations be confidential and impartial, and provides that legal sanctions can be taken against persons impairing the objectivity of the testing procedures. Test security requirements are established to ensure the fairness of oral and/or written tests for all competitors.

Violators of these examination security requirements will be rejected from the examination and may be prosecuted for criminal offenses under California law. State employees in violation of any of these requirements may have adverse action taken against them which could result in dismissal.

If you are successful in your examination, your name will be placed on the active employment list and certified to fill vacancies according to the conditions you specify on this form. If you are unwilling to accept work or do not reply promptly to communications, your name will be placed on the inactive list.

LOCATION IN WHICH YOU ARE WILLING TO WORK.

\* Please check your choices – You will not be offered a job in locations not checked.

\_\_\_ Statewide, if checked, no further  
Selection is necessary.

\_\_\_ Sacramento (Northern)  
3401

\_\_\_ Berkeley (Northern)  
0103

\_\_\_ Clovis (Northern)  
1001

\_\_\_ Chatsworth (Southern)  
9110

\_\_\_ Cypress (Southern)  
9114

\_\_\_ Imperial County (Southern)  
1303

\_\_\_ San Diego (Southern)  
3708

BERKELEY  
700 HEINZ AVENUE, BLDG. F  
BERKELEY, CA 94608

CHATSWORTH  
9211 OAKDALE AVENUE  
CHATSWORTH, CA 91331

CYPRESS  
5796 CORPORATE AVENUE  
CYPRESS, CA 90630

SAN DIEGO  
9174 SKY PARK CT. #150  
SAN DIEGO, CA 92123

HEADQUARTERS – SAC  
1001 I STREET  
SACRAMENTO, CA 95814

SACRAMENTO  
8800 CAL CENTER DRIVE  
SACRAMENTO, CA 95826

CLOVIS  
1515 TOLLHOUSE ROAD  
CLOVIS, CA 93612

IMPERIAL COUNTY  
301 HEBER AVENUE  
CALEXICO, CA 92231

TYPE OF EMPLOYMENT DESIRED (Check one or more):

Time Tenure: ☐ Permanent

☐ Limited Term

☐ Full Time  
(40 hrs wk)

☐ Part Time  
(Regular hrs.  
less than 40)

☐ Intermittent  
(On Call)

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

## RECRUITMENT EVALUATION

EXAMINATION TITLE: \_\_\_\_\_

TEST LOCATION: \_\_\_\_\_ DATE: \_\_\_\_\_

We at the Department of Toxic Substances Control are evaluating our recruitment efforts as directed by Government Code Sections 19234 and 19704. We need your help to do this and are asking that you fill out this form. The information you give us will be used for *statistical purposes only and will not affect your test score in any way*. Of, course, your participation is voluntary. Please note that we have not asked you for any information which would identify you. This information may be shared with the State Personnel Board.

Please complete this form prior to the interview and return it to the receptionist at the time of your interview.

1. Please tell us how you learned about this examination. *Check one or more boxes.*

- ☐ Newspaper or magazine advertisement. Name of publication: \_\_\_\_\_
- ☐ Monster.com
- ☐ Radio announcement ☐ Announcement in English ☐ Announcement in other language: \_\_\_\_\_
- ☐ Television announcement
- ☐ State Personnel Board ☐ Posted Announcement ☐ Telephone taped recording
- ☐ Announcement posted at a State Department not listed above.  
Name and location of Department: \_\_\_\_\_
- ☐ Announcement received in the mail.
- ☐ Conference or career fair. Name of event and location: \_\_\_\_\_
- ☐ I contacted DTSC Personnel.
- ☐ Community organization. Name of organization: \_\_\_\_\_
- ☐ College campus organization. Name of organization/college or university: \_\_\_\_\_
- ☐ Campus placement office. Name of college/university: \_\_\_\_\_
- ☐ Friend or relative who works for the State.
- ☐ Presentation or contact by a Department of Toxic Substances Control recruiter.
- ☐ Other (Please indicate what this source was): \_\_\_\_\_

2. Are you currently a state employee?

- ☐ Yes ☐ No

## AGE, ETHNICITY, AND DISABILITY FORM

The information collected on this page will be filed separately and only used for the purposes specified.

To aid the State of California in its commitment to equal employment opportunity, all applicants are asked to voluntarily provide gender, age, ethnic, and disability information for statistical analysis.

**Age – Select the age group that corresponds to your age.**

- ☐ (1) Under 21      ☐ (3) 21-39      ☐ (6) 40-69      ☐ (7) 70 AND OVER

**Specify your gender:**

- ☐ Male      ☐ Female

**Specify your ethnicity:**

- ☐ (7) **AMERICAN INDIAN OR ALASKAN NATIVE** – Persons having origins in any of the tribal people of North America, and who maintain cultural identification through tribal affiliation or community recognition.

ENTER TRIBAL IDENTIFICATION OR AFFILIATION: \_\_\_\_\_

- ☐ (2) **ASIAN** – Persons having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent. This includes China, Japan, and Korea.

- ☐ (1) **BLACK** – Persons having origins in any of the black racial groups of Africa.

- ☐ (8) **FILIPINO** – Persons having origins in any of the original people of the Phillippine Islands.

- ☐ (4) **HISPANIC** – Persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

- ☐ (6) **PACIFIC ISLANDER** – Persons having origins in the Pacific Islands, such as Samoa.

- ☐ (5) **WHITE** – Persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.

- ☐ (3) **OTHER (Specify)** - \_\_\_\_\_

- ☐ (Y) **DISABLED** – A person with a disability is an individual who: (1) has a physical or mental impairment or medical condition that limits one or more life activities, such as walking, speaking, breathing, performing manual tasks, seeing, hearing, learning, caring for oneself or working; (2) has a record of history of such impairment or medical condition; or (3) is regarded as having such an impairment or medical condition.

**THANK YOU FOR COMPLETING THIS QUESTIONNAIRE.**